WAO TSA-33

INITIATOR: RICHARD J. NEWTON TASK TITLE: USASMDC SUPPORT

WORK TITLE: LARGE OPTICS, MISSILE TRACKING, TECHNICAL SUPPORT

1. SCOPE: The contractor shall provide technical support for the development of a large optics tracking system to include design reviews, suggested approaches, historical data, and representation at conferences on the above.

- 2. APPLICABLE DOCUMENTS: none
- 3. BACKGROUND: WSMR is supporting the US Army Space and Missile Defense Command in the development of a joint observatory/missile tracking station in Socorro, NM. Technical support to develop the optics/tracking is required. This support includes design, design review, logistics support, test equipment, etc. Travel in and about NM is required, on a limited basis. Experience on a large telescope is required. The effort is anticipated to require 200 man-hours of support, with two trips to Socorro, NM and Apache Point Observatory. Also, a small amount of supplies will be required.

(as a suggestion, Dr. Kurt Anderson and Mr. Bruce Gillespie are known to have the requisite backgrounds)

- 4. QUALITY ASSURANCE PROVISIONS
- 4.1 General: The contractor shall comply with inspection article of the contract.
- 5. DELIVERY
- 5.1 Delivery shall not extend beyond 7 months.

New Mexico State University Response to TSA-33 Contract No. DAAD07-93-C-0125 Title: Large Aperture Optical Systems for Missile Tracking 3 February 1998

Start Date: 15 February 1998 Termination Date: 15 September 1998

Technical Support for Design, Development, and Operations

We will provide technical support associated with the planning and design for the development of large aperture telescope systems for the acquisition, tracking, and imaging of in-flight missile systems. In addition to design review and design, we will provide expertise associated with logistics, and operations.

Written technical reports, design reviews, proposals, and recommendations, will be provided as required. We will also supply supporting information and documentation and representation at project meetings and conferences.

Qualifications

Our qualifications are based upon extensive experience with the design of large astronomical telescopes at Apache Point Observatory and elsewhere. These telescope systems have characteristics similar to those needed for missile tracking purposes and some, in fact, are currently being used for experimental work in that area. We also bring proven experience with management, infrastructure support, and the like.

Dr. Kurt S. J. Anderson is Professor of Astronomy at NMSU and Site Director of Apache Point Observatory. He is a research astronomer with about 15 years experience associated with the technical design of the telescopes and instruments at Apache Point Observatory, including the management of contracting, permitting, and environmental issues, and subsequent operations management. He has led the design of other instruments as well. Bruce Gillespie, the Observatory Site Manager, is responsible for daily operations, observation support, and supervises site development activities at Apache Point. He has been Site Manager for five years, and brings to this effort an additional twenty years' experience with project and program management, administration, and operations, at Space Telescope Science Institute, Lockheed Research Labs, and Kitt Peak Observatory.